# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of	)	
	)	
Expanding Flexible Use of the 3.7 to 4.2	)	GN Docket No. 18-122
GHz Band	)	

#### COMMENTS ON PSSI REQUEST FOR STAY

Intelsat License LLC ("Intelsat") files these comments regarding the Request for Stay ("Stay Request") filed by PSSI Global Services, L.L.C. ("PSSI") in the above referenced proceeding. Intelsat opposes the Stay Request pursuant to 47 C.F.R. § 1.45(d) and the Federal Communications Commission's (the "FCC" or "Commission") Public Notice seeking comments on the Stay Request.

PSSI states that, as a provider of transportable satellite uplink/production services, its business consists of furnishing dozens of C-band (and Ku-band) mobile uplink trucks that primarily transmit live coverage of U.S. sports and entertainment events for its customers, who are broadcasters and cable networks.<sup>3</sup> PSSI also states that its business interests would be adversely affected by the clearing of the lower 300 MHz of C-band as instructed by the FCC.<sup>4</sup> But PSSI will not suffer irreparable harm without a stay because the potential interference issues it raises can be mitigated through other means. For example, PSSI could consider conducting

<sup>&</sup>lt;sup>1</sup> See PSSI Global Services, L.L.C. Request for Stay (June 17, 2020), <a href="https://ecfsapi.fcc.gov/file/10617871129293/Request%20for%20Stay.pdf">https://ecfsapi.fcc.gov/file/10617871129293/Request%20for%20Stay.pdf</a> [hereinafter "PSSI Stay Request"].

<sup>&</sup>lt;sup>2</sup> See Wireless Telecommunications Bureau Seeks Comment on PSSI Global Services, L.L.C. Request for Stay of 3.7-4.2 GHz Band Report and Order and Order of Proposed Modification, *Public Notice*, GN Docket No. 18-122, DA 20-644 (June 18, 2020), https://ecfsapi.fcc.gov/file/061838609756/DA-20-644A1.pdf.

<sup>&</sup>lt;sup>3</sup> PSSI *Ex Parte* Filing, 2 (Apr. 1, 2019), <a href="https://ecfsapi.fcc.gov/file/1040169027511/Ex%20parte%20Filing%20-%20April%201%2C%202019.pdf">https://ecfsapi.fcc.gov/file/1040169027511/Ex%20parte%20Filing%20-%20April%201%2C%202019.pdf</a>.

<sup>&</sup>lt;sup>4</sup> PSSI Stay Request, 15-17.

radio frequency site surveys before deploying its antennas to ensure they are a safe distance from 5G base station transmitters, working with future overlay licensees to facilitate coordination frameworks or to reach private agreements on interference mitigation, or transitioning its services to alternative distribution methods. Given the availability of options to avoid the harm PSSI claims it will suffer, there is no need to stay the proceeding and thereby jeopardize the accelerated relocation.

As the Commission recognizes, the success of the accelerated C-band transition under the very compressed timeline adopted by the Report and Order<sup>5</sup> depends upon prompt implementation of its framework. PSSI's Stay Request, if granted, would undermine the goal of an accelerated transition and thus would be contrary to the public interest.<sup>6</sup> Also, because PSSI fails to demonstrate that it will be irreparably harmed absent a stay or that its legal and factual arguments will prevail on the merits, its Stay Request must be denied.<sup>7</sup>

Intelsat responds to various aspects of the Stay Request: first, PSSI's assertion that the C-band transition will deprive it of satellite capacity in the future to provide its services; second, PSSI's assertions about the efficacy of filters that are to be installed on transportable earth

<sup>&</sup>lt;sup>5</sup> See Expanding Flexible Use of the 3.7 to 4.2 GHz Band, Report and Order and Proposed Modification, 35 FCC Rcd. 2343, paras. 302-06 (2020) [hereinafter "Report and Order"].

<sup>&</sup>lt;sup>6</sup> See also Expanding Flexible Use of the 3.7 to 4.2 GHz Band, Order Denying Stay Petition, GN Docket No. 18-122, DA 20-609, paras. 26-29 (June 10, 2020), https://docs.fcc.gov/public/attachments/DA-20-609A1.pdf.

<sup>&</sup>lt;sup>7</sup> See Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992, Order Denying Motion for Stay, 34 FCC Rcd. 10336, para. 6 (2019) (citing Nken v. Holder, 556 U.S. 418, 426 (2009) and discussing four criteria that a petitioner must satisfy in order to justify a stay of adopted Commission rules: "(1) whether the requesting party has made a strong showing that it is likely to succeed on the merits; (2) whether the requesting party will be irreparably injured without a stay; (3) whether a stay will substantially injure other interested parties; and (4) whether the public interest supports a stay"). The D.C. Circuit has also recently denied PSSI's request to stay rules adopted in the Report and Order, finding that the same arguments PSSI now presents before the Commission fail to satisfy these criteria. See Order, 1, PSSI Global Servc., L.L.C. v. Fed. Commc'ns Comm'n, No. 20-1142, ECF No. 1838533 (D.C. Cir. June 23, 2020).

stations; and third, PSSI's assertions about the potential for post-transition terrestrial interference to its transportable earth station operations. None of these assertions forms the basis for stay as they are either inaccurate or PSSI has the ability to remediate the alleged concern. In any event, as the Commission already concluded, the potential for harm from the C-band implementation that PSSI alleges is not imminent, which weighs against a grant of the Stay Request.<sup>8</sup>

### I. The Accelerated Relocation Framework Will Not Result in Loss of Satellite Capacity Used to Provide Services to Transportable Earth Stations.

PSSI's Stay Request repeats a claim that reflects a misunderstanding regarding the future availability of C-band satellite capacity in the contiguous U.S. to serve customers such as PSSI. Specifically, PSSI incorrectly asserts that Intelsat, its satellite service provider, will decrease or even eliminate transponder capacity for occasional use ("OU") services throughout the C-band transition, which, according to PSSI, would require that it upgrade its encoders to be able to process high order modulation in order to use less bandwidth. <sup>9</sup> This assertion is mistaken.

Contrary to PSSI's capacity shrinkage claim, Intelsat has proposed a customer Transition Plan to the Commission that will not "progressively eliminate" transponder capacity for the services used by PSSI, which are grouped within the "Contribution services" in Intelsat's Transition Plan. Instead, the Transition Plan recognizes and allocates dedicated capacity within the Galaxy fleet equal to the forecasted peak OU demand based on conversations with customers. As stated in Intelsat's Transition Plan, this peak simultaneous usage has been at

3

<sup>&</sup>lt;sup>8</sup> In the FCC's recently issued Order denying small satellite operators' Petition for Stay, the FCC explicitly rejected PSSI's arguments that the acceleration would cause a decline in available OU transponder inventory and harmful interference from 5G operations. The Order also rejected the notion that, coupled with an alleged lack of antenna filters, these circumstances would cause PSSI irreparable harm absent a stay. The FCC specifically concluded that "PSSI has not shown that the harms it alleges are either imminent or irreparable" because "5G operations cannot commence until after FSS operations have been cleared from the band" and "the alleged harm would not occur until after December 2021 . . . at the earliest." *Order Denying Stay Petition*, DA 20-609, para. 14.

<sup>&</sup>lt;sup>9</sup> See, e.g., PSSI Stay Request, 9-10.

twenty transponder units, which are utilized by 90 discrete customers to generate 16,000 separate Contribution service sessions. <sup>10</sup> Intelsat has reviewed this usage and ensured continuity for its satellite customers, including OU customers such as PSSI, in accordance with the "same or better" standard that the FCC mandated in the Report and Order. <sup>11</sup>

In short, Intelsat has proposed an adequate pool of future Contribution service capacity based on the actual usage by its customers. While PSSI may wish to engage in a technology upgrade of encoders to become more commercially efficient, that will not be required as part of the C-band transition. As such, PSSI's allegations regarding a shortage of capacity are incorrect and fail to demonstrate there is any problem that the FCC must address or solve.

#### II. Filters Are Available to be Installed on Transportable Earth Stations.

PSSI also argues that there are no passband filters available for use by transportable earth stations. This is not factual and, thus, its argument on this point is without merit. In addition to this assertion in its Stay Request, PSSI has made several other filings with the Commission asserting that the rules adopted by the Report and Order require wholly new types of "yet-to-bedesigned filters" for the transition. <sup>12</sup> These claims are not accurate.

<sup>&</sup>lt;sup>10</sup> See Intelsat License LLC C-Band Clearing Transition Plan, 7-8 (June 19, 2020), https://ecfsapi.fcc.gov/file/106190607411191/Transition%20Plan%20-%20Intelsat%206-19-2020.pdf.

<sup>&</sup>lt;sup>11</sup> See id. at 15.

<sup>&</sup>lt;sup>12</sup> See PSSI Comments Regarding Transition Payments, 3-4 (June 15, 2020), <a href="https://ecfsapi.fcc.gov/file/1061615897131/PSSI%20Reimbursement%20Comments%20Final.pdf">https://ecfsapi.fcc.gov/file/1061615897131/PSSI%20Reimbursement%20Comments%20Final.pdf</a>; PSSI Comments on SSO Joint Petition for Stay, 11-12, 20 (May 27, 2020), <a href="https://ecfsapi.fcc.gov/file/105272141027253/PSSI%20Comments%20on%20SSO%20Joint%20Petition%20for%20Stay%20and%20Attachments.pdf">https://ecfsapi.fcc.gov/file/105272141027253/PSSI%20Comments%20on%20SSO%20Joint%20Petition%20for%20Stay%20and%20Attachments.pdf</a>; see also generally PSSI Written Ex Parte Presentation (Oct. 18, 2019),

https://ecfsapi.fcc.gov/file/101801726144/PSSI%20Written%20Ex%20Parte%20Interference%2 <u>0Tests.pdf;</u> PSSI Ex Parte Meeting Notice (May 9, 2019), https://ecfsapi.fcc.gov/file/1051011382351/Ex%20Parte%20Filing%20---

 $<sup>\</sup>frac{https://ecfsapi.fcc.gov/file/1051011382351/Ex\%20Parte\%20Filing\%20-- \\ \%20May\%206\%2C\%202019.pdf.$ 

Intelsat has worked with reputable filter manufacturers throughout the course of this proceeding to ensure that earth station filters will be available and will function to filter out the lower 300 MHz of the C-band post-transition on all earth stations, both fixed and transportable, as the FCC's rules require. There is no merit to PSSI's claim that its transportable earth stations are so different that the filters Intelsat has proposed for earth station use in its Transition Plan cannot readily be fitted on the transportable earth station feedhorn. Low Noise Block converters ("LNBs") are mass-produced items with standardized flange design (CPR-229G) to ensure universal compatibility. As shown in the pictures below, a passband filter that can reject the lower 300 MHz of the C-band has been designed, is available, and can be installed on transportable earth stations. Intelsat's proposed filters are designed to be mechanically compatible with this standardized flange design and can be simply and seamlessly inserted between the LNB and the orthomode transducer ("OMT"), even in transportable earth stations.







Further, nothing in the Report and Order obligates Intelsat to design a filter that is able to be "fold[ed] to lie flat on truck roof tops during transport[] and deploy[ed] to exact physical specifications during operations" and PSSI fails to articulate why this would be the only design acceptable to it.<sup>13</sup> In fact, PSSI's transportable OU earth stations generally require a material amount of set up and take down time whenever they are used, so to the extent a filter does not fold, it can be taken off and reinserted at the next location of use.<sup>14</sup> Passband filters that meet the Commission's technical specifications to filter out the lower 300 MHz of the C-band are available and are usable on transportable earth stations; Intelsat has confirmed this in testing.

-

<sup>&</sup>lt;sup>13</sup> PSSI Comments Regarding Transition Payments, 3.

<sup>&</sup>lt;sup>14</sup> This sort of installation and de-installation presumably already occurs when a transportable earth station operator employs an altimeter radar blocking filter on its antennas.

Thus, PSSI's assertions about needing new, yet-to-be designed filters are not correct and cannot warrant a stay of the C-band Report and Order.

## III. Post-Transition Potential Interference to Transportable Earth Stations Will Not Cause Irreparable Harm Because It Can be Mitigated Through Other Means.

PSSI's Stay Request also asserts that "no existing filtering solutions can protect [OU transportable earth stations] from interference and damage from high powered emissions of new 5G licensees operating in the lower portion of the C-band." Intelsat acknowledges that a passband filter cannot completely counteract the effects of a future 5G base station operating right next to one of PSSI's transportable earth stations, in which case the filter could become oversaturated. It is common sense, however, for OU transportable earth station operators to take reasonable measures to assess the environment prior to set up and to select a location in which they can eliminate the risk of interference. An OU operator can simply avoid setting up its transportable earth station in very close proximity to a 5G base station.

PSSI also argues that the nature of its operations creates the possibility of harmful out-of-band emission ("OOBE") interference from future 5G operations.<sup>17</sup> That is a function of the fact that the FCC's interference rules relating to future terrestrial operations largely rely upon

<sup>&</sup>lt;sup>15</sup> PSSI Stay Request, ii-iii.

While Intelsat has expressed concerns about certain aspects of the adopted out-of-band emission rules applicable to earth stations with elevation angles below 19 degrees and filters specific to Telemetry, Tracking, and Control ("TT&C")/Gateway sites, those concerns are not necessarily related to the operation of the filters for OU transportable earth stations, which typically operate at an elevation angle greater than 19 degrees. *See* Intelsat License LLC Petition for Reconsideration, 8-18 (May 26, 2020), <a href="https://ecfsapi.fcc.gov/file/10526884925025/Petition%20for%20Reconsideration%20-%20Intelsat%2026%20May%202020.pdf">https://ecfsapi.fcc.gov/file/10526884925025/Petition%20for%20Reconsideration%20-%20Intelsat%2026%20May%202020.pdf</a>.

<sup>&</sup>lt;sup>17</sup> See PSSI Stay Request, 11-12 ("The downlink signal in the 3.7-4.2 GHz band is received by PSSI's antennas at very low power levels from the satellite located 22,300 miles above the Earth. Consequently, the ability to receive those signals is greatly impacted by others operating in adjacent out-of-band and in-band frequencies, which will include the new 5G Flexible Licenses. PSSI has repeatedly warned about the harm that will result from higher powered operations in the lower portion of the C-band or in adjacent bands, especially by new 5G transmitters of unknown and unregistered locations and power.")

protection of fixed earth station locations, as PSSI has observed.<sup>18</sup> The Report and Order, for example, defines the Power Flux Density level that needs to be met at an earth station in order to achieve the level of protection prescribed in the Commission's rules. This framework implies that earth station locations must be **fixed** and **known** in order to receive this protection.<sup>19</sup> But OU transportable earth stations, by their nature and use, do not have fixed locations that can be easily established.

Recognizing that OU transportable earth stations may experience interference because their locations are not fixed and thus unknown to flexible use licensees, Intelsat, as a former member of the C-Band Alliance, had proposed that PSSI be allowed to select and provide known locations with fixed latitude/longitude positions to the FCC in order to receive protection from terrestrial interference.<sup>20</sup> The Commission declined to adopt that proposal and instead made it clear that operators of transportable earth stations can make use of "other methods of responding to temporary, targeted spectral needs on a negotiated, non-interfering basis, such as through the use of Special Temporary Authority."<sup>21</sup> PSSI failed to address why this path would be ineffective in dealing with its concerns.

Thus, the Commission appears to have recognized something PSSI does not – namely, that there are practical solutions that can be employed to address PSSI's stated concerns. In fact, PSSI today uses prior coordination – often performed on an expedited basis – in its use of uplink frequencies shared with Fixed Service operations in the band. There is no reason why PSSI could

<sup>&</sup>lt;sup>18</sup> See, e.g., PSSI Comments Regarding Transition Payments, 2 (June 15, 2020).

<sup>&</sup>lt;sup>19</sup> See Report and Order, paras. 354-55, 360-71, 382, App'x A (adopting 47 C.F.R. §§ 27.55(d), 27.1423).

<sup>&</sup>lt;sup>20</sup> *See* C-Band Alliance Notice of *Ex Parte* Meeting, 1-2 (Sept. 18, 2019), https://ecfsapi.fcc.gov/file/109181812012523/CBA%20-%20Ex%20Parte%20re%209-16-19%20Bureau%20Meeting%20and%20Transportable%20Proposal.pdf.

<sup>&</sup>lt;sup>21</sup> Report and Order, para. 151, n.421. This also shows that PSSI's potential interference arguments have also been presented to, considered, and denied by the Commission.

not employ a similar type of coordination with 5G operators to mitigate the potential for OOBE interference to its downlink operations.

Coordination could take the form of informal arrangements with 5G operators or the Commission may determine a more formal framework is a superior option. There is no question that FCC precedent allows private parties to have agreements on technical specifications for interference matters, including on matters such as prior coordination. Nothing in the Report and Order precludes PSSI from deploying its OU transportable earth stations at any given location and negotiating a temporary coordination agreement with the relevant flexible use operator or operators. Any number of possible coordination options could be practical in addressing PSSI's potential interference concerns and they would not require placing the entire C-band implementation on indefinite hold for no good reason.

<sup>&</sup>lt;sup>22</sup> PSSI Comments Regarding Transition Payments, 2 (June 15, 2020). The Commission has always recognized in its *Emerging Technologies* framework that technical feasibility depends on the technical design of individual new systems and services and encouraged private agreement to modify adopted technical specifications to the extent compliant with FCC's rules. *See, e.g.*, Report and Order, App'x A (adopting 47 C.F.R. § 27.1424); Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, *1st Report and Order and 3d Notice of Proposed Rule Making*, 7 FCC Rcd. 6886, para. 29 (1992).

For all these reasons, PSSI fails to satisfy any criteria that warrant a stay of the rules adopted in the Report and Order. Its Stay Request should therefore be denied.

Respectfully submitted,

Intelsat License LLC

Laura H. Phillips Qiusi Y. Newcom Faegre Drinker Biddle & Reath LLP 1500 K Street NW Suite 1100 Washington, D.C. 20005 202-842-8800 laura.phillips@faegredrinker.com Counsel for Intelsat License LLC

Michelle V. Bryan
Executive Vice President, General Counsel and Chief Administrative Officer
Susan H. Crandall
Associate General Counsel
Intelsat US LLC
7900 Tysons One Place
McLean, VA 22102-5972

June 25, 2020

### **CERTIFICATE OF SERVICE**

I hereby certify that on this 25th day of June 2020, a true copy of the foregoing Intelsat

License LLC's Comments to PSSI's Request for Stay was served via electronic mail upon:

Stephen Díaz Gavin

RIMON, P.C.

1717 K Street, N.W., Suite 900

Washington, D.C. 20006

stephen.diaz.gavin@rimonlaw.com

Counsel for PSSI Global Services, LLC

Laura H. Phillips

Faegre Drinker Biddle & Reath LLP

1500 K Street NW Suite 1100

Washington, D.C. 20005

202-842-8800

Laura.Phillips@faegredrinker.com